Decision, December 11, 1912

THE COMMISSIONER OF PATENTS, WASHINGTON, D. C. DEPARTMENT OF THE INTERIOR. UNITED STATES PATENT OFFICE, *Washington, D. C* ., December 11, *191* 2.

Before the Primary Examiner , *Division* 22

In Re Interference #34455 Alexander Graham Bell et al. *v* . George Francis Myers. Flying Machines.

Alexander Graham Bell et al., Care Mauro, Cameron, Lewis & Massie, 700 Tenth St., H. W., Washington, D. C.

Please find below a communication from the EXAMINER in regard to the above-cited case .

Very respectfully . E. B. Moore , *Commissioner of Patents* .

—1759

This is a motion brought by Myers under Rule 109 to amend by including his claims as additional county to the issue. These claims correspond to claims 2, 4, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 20, 24, 27, 28 of the patent to Bell et al.

2B-42M. In a flying machine, the combination of a supporting surface having a positive angle of incidence, a pair of lateral balancing rudders, one on each side of the medial fore and aft line of the structure, and each of said rudders normally having a zero angle of incidence, and connections between said rudders whereby one is adjusted to a positive and the other to a negative angle of incidence.

4B-44M. In a flying machine, the combination of a pair of suitably spaced supporting surfaces having a positive angle of incidence, means uniting said supporting surfaces, and a pair of horizontal balancing rudders normally having a zero angle of incidence and arranged one on each side of the medial fore and aft line of the structure and connections between said rudders.

6B-46M. In a flying machine, the combination of a supporting surface having a positive angle of incidence, a pair of lateral balancing rudders, one arranged on either side of the medial fore and aft line of the machine, means normally supporting said lateral balancing rudders at a zero angle of incidence, and means operating to shift said balancing rudders to equal and opposite angles of incidence.

2

7B-47M. In a flying machine, the combination of a supporting surface having a positive angle of incidence, a pair of lateral balancing rudders, one arranged on either side of the medial fore and aft line of the machine, means normally supporting said lateral balancing rudders at a zero angle of incidence, and means operating to simultaneously shift said balancing rudders to equal and opposite angles of incidence.

8B-48M. In a flying machine, the combination of a supporting surface having a positive angle of incidence, a pair of lateral balancing rudders, one arranged on either side of the medial fore and aft line of the machine, connections between said balancing rudders, means normally supporting said lateral rudders at a zero angle of incidence, and means operating to shift said balancing rudders to equal and opposite angles of incidence.

9B-49M. In a flying machine, the combination of a plurality of supporting surfaces having a positive angle of incidence, means uniting said supporting surfaces, and a pair of horizontal balancing rudders, one on each side of the medial fore and aft line of the structure and each mounted outside of the lateral marginal extremities of said supporting surfaces and having normally a zero angle of incidence.

11B-51M. In a flying machine, the combination of a pair of suitably spaced supporting surfaces having a positive angle of incidence, means uniting said supporting surfaces, a lateral balancing rudder normally having a zero angle of incidence and mounted on an axis transverse to the line of flight on each side of the medial fore and aft line of the structure, and means inclining the said rudder on one side of the structure at a positive angle of incidence and the rudder on the opposite side of the structure at a negative angle of incidence.

12B-52M. In a flying machine, the combination of a plurality of suitably spaced supporting surfaces having a positive angle of incidence, means uniting said supporting surfaces, a pair of lateral balancing rudders, one on each side of the medial fore and aft line of the structure, and each of said rudders normally having a zero angle of incidence, and a single controlling lever operatively connected to both of said rudders.

13B-53M. In a flying machine, the combination of a plurality of suitably spaced supporting surfaces having a positive angle of incidence, means uniting said supporting surfaces, a pair of lateral balancing rudders, one on each side of the medial fore and aft line of the structure and outside of the marginal extremities of said supporting surfaces and each of said rudders normally having a zero angle of incidence, and a single controlling lever operative connected to both of said rudders.

14B-54M. In a flying machine, the combination of a plurality of suitably spaced supporting surfaces having a positive angle of incidence, means uniting said supporting surfaces, a pair of lateral balancing rudders, one on each of the medial fore and aft line of the structure and each of said rudders normally having a zero angle of incidence, and a single controlling lever in operatively connected to both of said rudders and having a part in operative relation with the person of the aviator.

15B-55M. In a flying machine, the combination of a plurality of suitably spaced supporting surfaces having a positive angle 3 of incidence, means uniting said supporting surfaces,

a pair of lateral balancing rudders, one on each side of the medial fore and aft line of the structure and outside of the marginal extremities of said supporting surfaces and each of said rudders normally having a zero angle of incidence, and a single controlling lever operatively connected to both of said rudders and having a part in operative relation with the person of the aviator.

16B-56M. In a flying machine, the combination of a plurality of suitably spaced supporting surfaces having a positive angle of incidence, means uniting said supporting surfaces, a pair of lateral balancing rudders, one on each side of the medial fore and aft line of the structure and each of said rudders normally having a zero angle of incidence, and a controlling lever operatively connected to both of said rudders and having a part embracing the body of the aviator.

17B-57M. In a flying machine, the combination of a plurality of suitably spaced supporting surfaces having a positive angle of incidence, means uniting said supporting surfaces, a pair of lateral balancing rudders, one on each side of the medial fore and aft line of the structure and outside of the marginal extremities of said supporting surfaces, and each of said rudders normally having a zero angle of incidence, and a controlling lever operatively connected to both of said rudders and having a part embracing the body of the aviator.

18B-58M. In a flying machine, the combination of a plurality of suitably spaced supporting surfaces having a positive angle of incidence, a member projecting outside of the lateral marginal line of said surfaces, a rudder fulorumed to each of said projecting members and normally having a zero angle of incidence, and means for operating said rudders.

20B-60M. In a flying machine, the combination of a pair of superposed supporting surfaces having a positive angle of incidence, means uniting said supporting surfaces into a rigid non-flexing structure, a pair of lateral balancing rudders normally having a zero angle of incidence, one on each side of the medial fore and aft line of the structure and outside of the marginal extremities of said supporting surfaces, means connecting said rudders

together whereby a movement of one imparts a reverse movement to the other, and operating means connected to both of said rudders.

24B-62M. In a flying machine, the combination of an aerodrome having a positive angle of incidence and two lateral balancing rudders normally having a zero angle of incidence, one on each side of the medial fore and aft line of the machine and pivotally supported on the outside of the lateral marginal lines thereof, and means automatically operated by the body movements of the aviator and operatively connected to said balancing rudders.

27B-63M. In a flying machine, the combination of a plurality of suitably spaced supporting surfaces having a positive angle of incidence, means uniting said supporting surfaces, a pair of lateral balancing rudders, one on each side of the medial fore and aft line of the structure, and each of said rudders normally having a zero angle of incidence, and connections between said rudders whereby one is adjusted to a positive and the other to a negative angle of incidence.

28B-64M. In a flying machine, the combination of a plurality of suitably spaced supporting surfaces having a positive angle of incidence, means uniting said supporting surfaces, a pair of lateral balancing rudders, one on each side of the medial fore and aft line of the structure, and each of said rudders normally having a zero angle of incidence, and means for simultaneously adjusting said rudders the one to a positive and the other to a negative angle of incidence.

Myers further moves that the interference be dissolved on the following grounds:

7th. That the opposing parties are not entitled to make the claims constituting the counts of the issue of the interference for the reason that nowhere in their specification as originally filed is there any disclosure that the supporting surface or surfaces are normally arranged at “a positive angle of incidence.”

8th. That the opposing parties are not entitled to make the claims constituting the counts of the interference for the reason that nowhere in their specification as finally passed to issue is there any disclosure that the supporting surface or surfaces are normally arranged at “a positive angle of incidence.”

9th. That the opposing parties have no right to make the claims constituting the counts of the issue of the interference for the reason that two years after their filing date (on or about August 1st, 1911) the introduction of an indication that the supporting surface or surfaces are at “a positive angle of incidence”, constitutes now matter.

The remaining parts of the motion attacking the patent to Bell et al. has been refused transmission to the Primary Examiner and will not be considered.

The claims involved are:

Count 1.

In a flying machine, the combination of a supporting surface having a positive angle of incidence, a pair of lateral balancing rudders, one on each side of the medial fore and aft line of the structure and each of said rudders normally having a zero angle of incidence and connections between said rudders.

Count 2.

In a flying machine, the combination of a supporting surface having a positive angle of incidence, a pair of lateral balancing rudders, one on each side of the medial fore and aft line of the structure, and each of said rudders normally having a zero angle of incidence, and means for simultaneously adjusting said rudders, the one to a positive and the other to a negative angle of incidence.

Count 3.

In a flying machine, the combination of a pair of suitably spaced supporting surfaces having a positive angle of incidence, means uniting said supporting surfaces, a pair of horizontal balancing rudders normally having a zero angle of incidence and 5 arranged one on each side of the medial fore and aft line of the structure, and connection between said rudders whereby one is adjusted to a positive and the other to a negative angle of incidence.

Count 4.

In a flying machine, the combination of a pair of suitably spaced supporting surfaces having a positive angle of incidence, means uniting said supporting surfaces, and a pair of horizontal balancing rudders normally having a zero angle of incidence, one on each side of the medial fore and aft line of the structure, and each of said rudders being mounted outside of the lateral marginal lines of said supporting surfaces and on an axis transverse to the line of flight.

Count 5.

In a flying machine, the combination of a pair of superposed supporting surfaces having a positive angle of incidence, means uniting said supporting surfaces into a rigid non-flexing structure, a pair of lateral balancing rudders normally having a zero angle of incidence and one on each side of the medial fore and aft line of the structure, means connecting said rudders together whereby a movement of one imparts a reverse movement to the other, and operating means connected to both of said rudders.

In taking up the motion to amend, it is obvious to the examiner, and it is not controverted in the brief filed by Bell et al., that every element in Bell's claims 2, 4, 6, 7, 8, 9, 11, 18, 27, 28, is clearly disclosed in Myers' specification and drawing, and so far as these claims are concerned it is merely necessary to point out that the two horizontal rudders 18 are located outside the lateral margins of the supporting planes, have a cable connection, means (the

swinging car 4) for shifting the rudders to opposite angles of incidence, and means for normally supporting the rudders at zero angles of incidence.

In connection with Myers' claims 52, 53, 54, 55, 56, 57, 62, corresponding to claims 12, 13, 14, 15, 16, 17 and 24 of Bell et al., it is well established that these claims having been copied from letters patent the language must be interpreted in the light of the disclosure in the specification and drawings thereof. In the patent the operating cable is connected with a horizontal lever 38 provided with forwardly extending arms 39 embracing the body of the aviator so that when the lateral equilibrium is destroyed the instinctive movement of the aviator 6 will cause him to lean toward the high side, which operates both rudders to restore equilibrium. In the Myers device the aviator is positioned in a swinging car which is connected by cables to the horizontal rudders whereby, when the aeroplane tips laterally, the car by gravity operates the rudders automatically entirely independent of any movement of the operator. Each of these claims being specifically limited to a single control lever, having a part in operative relation with the person of the aviator (the arms 39) or to the means automatically operated by the body movements of the aviator, it is clear to the examiner that any attempt to read such a construction in connection with Myers' swinging car would be forced, as the plain meaning of the language when read in the light of the Bell structure and its function is entirely different.

In connection with claim 60 of Myers, corresponding to claim 20 of Bell et al., it is clear that Myers shows means (a cable connection) between the rudders similar to that of Bell et. al., who shows the cables connected to an operating means (a lever), while in Myers they are connected to a swinging car, which is the operating means. In both if the lever or car were omitted in the connection the rudders could be operated by drawing on the cable by hand.

The motion is granted as to Myers' claims 42, 44, 46, 47, 48, 49, 51, 58, 60, 63, 64 and denied as to his claims 52, 53, 54, 55, 56, 57, 58 and 62.

A limit of appeal from so much of the decision denying Myers's right to make claims 52, 53, 54, 55, 56, 57, 58 and 62 is fixed at twenty days, there being no appeal to that part of the decision approving his right to make the remaining claims.

In taking up the motion to dissolve the irrelevant contention of Myers that nowhere in the Bell et al. specification is there a disclosure that the supporting surfaces are normally 7 arranged at a positive angle of incidence is not clear to the examiner for the reason that none of the claims involved contains such a limitation. In none of them does the word normal or normally appear in connection with the supporting planes. In each appears the limitation that the supporting surfaces have a positive angle of incidence, the plain meaning of which is that when on the ground or in normal flight they are inclined at a positive angle, and the drawings clearly disclose this feature. The argument in regard to the non-patentability of the claims in view of the patent to the Wrights and others is entirely irrelevant and out of place, as the motion furnishes no basis for such a contention. The Wrights patent was fully considered in the ex parts prosecution of this case, and the assertion that they show a supporting surface and in addition a pair of lateral balancing rudders normally at a zero angle or incidence has absolutely no warrant or function. The Wrights balance by warping the main planes, whereas in Bell et al. the horizontal rudders effect that function and the main planes constitute a separate element. The contention of Myers is not only farfetched but has no basis of fact.

The motion is denied and there being no appeal from a favorable decision no limit of appeal is set.

Respectfully submitted,

THE COMMISSIONER OF PATENTS, WASHINGTON, D. C. DEPARTMENT OF THE INTERIOR. UNITED STATES PATENT OFFICE, *Washington, D. C* ., December 11, *191* 2.

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Very respectfully . E. B. Moore , *Commissioner of Patents* .

—1759

This is a motion brought by Bell et al. to dissolve the interference on the ground that Myers has no right to make the claims involved in the interference, which are:

In a flying machine, the combination of a supporting surface having a positive angle of incidence, a pair of lateral balancing rudders, one on each side of said rudders normally having a zero angle of incidence and connections between said rudders.

In a flying machine, the combination of a supporting surface having a positive angle of incidence, a pair of lateral balancing rudders, one on each side of the medial fore and aft line of structure, and each of said rudders normally having a zero angle of incidence, and means for simultaneously adjusting said rudders, the one to a positive and the other to a negative angle of incidence.

In a flying machine, the combination of a pair of suitably spaced supporting surfaces having a positive angle of incidence, means uniting said supporting surfaces, and a pair of horizontal 2 balancing rudders normally having a zero angle of incidence, one on each side of the medial fore and aft line of the structure, and each of said rudders being

mounted outside of the lateral marginal lines of said supporting surfaces and on an axis transverse to the line of flight.

In a flying machine, the combination of a pair of superposed supporting surfaces having a positive angle of incidence, means uniting said supporting surfaces into a rigid non-flexing structure, a pair of lateral balancing rudders normally having a zero angle of incidence and one on each side of the medial fore and aft line of the structure, means connecting said rudders together whereby a movement of one imparts a reverse movement to the other, and operating means connected to both of said rudders.

The reasons alleged in support of the motion are:

(1) because nowhere in his original application Serial No. 466,080, Filed December 5, 1908, is there any disclosure that the lateral balancing rudders are “normally” arranged at a zero angle of incidence;

(2) because nowhere in the description as originally filed in Myers' application Serial No. 657, 719. Filed October 31, 1911, is there any indication that the lateral balancing rudders are “normally” arranged at a zero angle of incidence; and

(3) because the introduction into Myers' application Serial No. 657,719, involved in this interference, of an indication that the lateral balancing rudders are normally arranged at a zero angle of incidence constitutes new matter.

A more cursory examination of Fig. 2 of the drawings of the Myers application directly involved, and also those of the parent application, Serial No. 466,080, clearly discloses that the lateral balancing rudders are normally arranged at a zero angle of incidence, and to dispose of any doubt on this question, and that the contention of Bell et al. has no foundation, both applications positively state the fact in lines 58 to 60, page 2, of 466,080, and lines 6 to 8, page 4, of 657,179, in the following language:

“The more the aeroplanes carreon the more the auxiliary surfaces are moved from their normal horizontal positions.”

The motion to dissolve is denied, and their being no appeal no limit of appeal is fixed.

Respectfully submitted.